

Notes from the 11/29/05 MI BPM Upgrade Meeting
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These notes can be found in Beams docDB #1526.

Agenda as announced:

Project Announcements : Bob and Steve
Timing Board : Bill
Front-end software/MVME : Luciano, Steve, Margaret
Combiner Board status : Marv, Tim, Bob Forster, Vince
Transition Board: Manfred, Stefano, Vince
Signal cables : Manfred, Bob Forster
MI40 status : Marv, Peter, Luciano, others
Online software : Brian
Validation: Rob Kutschke
AOB

-1. Lots of progress!

- Since the meeting there has been a great deal of progress in understanding and debugging the MI40 installation. I'm sure that there will be information sent out to the mailing list as well as various docDB information coming out and we'll hear more details at next Tuesday's meeting.

0. Project Announcements

- Downtime today, Marv & co. are in the tunnel installing the next 30 combiner boards.

- Bob and Steve are happy to see the MI40 installation up and running. Data is good to look at.

- Dwayne, Peter and Charlie are looking into the "Echotek problem" to understand how the triggering, buffering, and readout of data can be made to work without occasional data confusion. The backup plan, if this cannot be made to work with "standard" Echotek firmware is to pursue modifications to the FPGA.

1. Transition Board: Manfred, Stefano, Vince

- 5 blank boards are being made and will be stuffed at Fermilab. Most of the parts are here and enough parts are available for at least a few channels to be used for checkout of the board. We believe that the 5 boards will be enough for the Jan 15 single house system.

- Work is proceeding on the control system for the transition board. There is a plan to send the commands to set the gains and diagnostic signals but no plan to read back gain settings. Don't know whether that is a problem or a worry yet (not being able to verify the gain settings).

2. Timing Board : Bill

- One board is assembled and checks out fine on the test stand (FCC3). No issues. So the remaining boards are being assembled. The next board will be available soon and will give us a board for the MI40 setup.

3. Combiner Board status : Marv, Tim, Bob Forster, Vince

- 123 combiner boards are installed as of 11/29/05. This is more than half!

- 10 non-combiner boards are fabricated. The question of when to install them came up. It probably doesn't help too much to install them before the magnets are installed (March shutdown) but we can discuss further if it does make sense to get it done and out of the way.

4. Front-end software/MVME : Luciano, Steve, Margaret

- Progress on the front-end software. p and pbar delays are implemented. There are still problems working with W27 (the MI BPM version of W25/R25). Luciano is working with Bob West to resolve.

- Work is proceeding on diagnostic data. Questions about delays for the diagnostics, device for the diagnostic data, Echotek settings, etc.

- The software specification document will be released shortly and needs to be reviewed and signed off.

- The requisition for the PMCUCD cards is moving along.

5. Signal cables : Manfred, Bob Forster

- The requisition for the signal cables is with purchasing.

6. MI40 status : Marv, Peter, Luciano, others

Validation: Rob Kutschke

- A horizontal BPM is connected to a mix of prototype and production upgrade hardware and software in MI40.

- Rob Kutschke took some data (from the front end directly) and has written a note beams-doc-2030 (to be updated) that looks at the data and interprets what has been seen so far.

- Rob showed plots and we had an interesting discussion of the features of the data. This has in turn led to many questions and investigations. Since then the setup has changed and various problems have been resolved. It will be interesting to look at new data.

7. Online software : Brian

- W14 ("I6") is almost finished.
W27 ("W25/R25") is working but bugs/problems are being fixed.

- The two pages will be moved/remapped to new locations and Brian will tell us all where they are and what they are called.

8. AOB

- At MI40 the default setup is to collect closed orbit measurements unless TBT are asked for (by hand).

- Luciano will be away starting December 12 until January 15.